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EXAMINER
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FISH, JAMIESON W

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/744,771

Applicant(s)

PAZ ET AL.

Examiner

Jamieson W. Fish

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 42-94 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 42-94 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statements (IDS) submitted on 3/12/01 and 1/31/05 have been considered by the examiner.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims **42, 44-57, 60-66, 71-77** are rejected under 35 U.S.C. 102(e) as being anticipated by Rangan et al. (US 6,154,771).
4. Regarding claim **42**, Rangan teaches a method of personalizing a broadcast video streams comprising: providing a broadcast video stream (See Fig. 1 ISP and Col. 23 lines 34-40 Broadcast video streams are provided to ISP); personalizing the stream by generating overlay data at a central distribution station (See Fig. 1 Col. 21 lines 27-33, Col. 23 lines 34-67, Col. 24 lines 1-5 ISP is a central distribution station that generates hotspots which are overlay data); transmitting the personalized broadcast stream to the user using a compressed video transport (See Col. 15 lines 23-40 Hypervideo is transmitted to STBs in compressed stream); and overlaying said overlay data at a set-top box of said

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user (See Col. 15 lines 23-40) wherein at least some of said overlay data is not a block-replacement overlay (See Col. 21 lines 26-33 Translucent overlays are not a block replacement overlay since blocks from one image are blended with another and not replaced). This claim is a method of personalizing which comprises a step of personalizing. In subsequent dependent claims "said personalization" is interpreted to mean either the method of personalizing or the step of personalizing.

5. Regarding claim **44**, Rangan teaches wherein said overlay data comprises transparent data that visually combines underlying information (See Col. 15 lines 23-35, Col. 21 lines 28-40)

6. Regarding claim **45**, Rangan teaches wherein said transmitting comprises transmitting in a broadcast system, whereby the personalized transmitted stream reaches a plurality of subscribers (See Col. 24 lines 18-22).

7. Regarding claim **46**, Rangan teaches wherein a designated user can view said personalized stream (See Col. 12 lines 38-48 User can be restricted access to content).

8. Regarding claim **47**, Rangan teaches wherein said personalization makes said stream interactive (See Col. 11 lines 7-25).

9. Regarding claim **48**, Rangan teaches receiving a user input at said central distribution station (See Col. 11 lines 40-67, Col. 12 lines 1-37 The user clicks on a hotspots and ISP receives input and returns associated URL).

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10. Regarding claim **49**, Rangan teaches wherein said input comprises a response to content of a personalized stream (See Col 11 lines 7-25 Clicking on a hotspot is a response to the personalized stream).

11. Regarding claim **50**, Rangan teaches determining an identification of a user for which to perform said personalization, from said user input (Col. 12 lines 38-56 Information is returned based on "unique (network) identities").

12. Regarding claim **51**, Rangan teaches wherein said user input comprises a user login ID (See Col. 12 lines 38-56 Information is returned based on "unique (network) identities" A unique network identity is a user login ID).

13. Regarding claim **52**, Rangan teaches wherein said video stream is provided as a compressed video stream (See Col. 11 lines 40-63 Video remains compressed while ISP inserts hotspots. Thus video stream was provided in compressed form).

14. Regarding claim **53**, Rangan teaches wherein said stream is transmitted using a single channel of said transport (See Col. 22 lines 17-28 SUV receive hypervideo feeds within network bandwidth. The network bandwidth is a single channel of transport).

15. Regarding claim **54**, Rangan teaches wherein said personalizing comprises modifying a visual portion of said stream (See Col. 15 lines 23-34, Col. 21 lines 28-33, Col. 23 lines 60-67, Col. 24 lines 1-5 Hotspots modify visual portion of original content).

16. Regarding claim **55**, Rangan teaches wherein said personalizing comprises modifying a data section of said transport, for application by a set-top

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box at said user (See Col. 15 lines 24-60, Col. 23 lines 20-63, Inserting Hotspots is modifying a data section of transport. Hotspots allow user to alter playback).

17. Regarding claim **56**, Rangan teaches wherein modifying said data section comprises adding display commands for said set-top box to said data section (See Col. 23 lines 20-25, Col. 25 lines 1-33 The Set Top Box extracts hotspots from transport stream. Clicking on Hotspots (commands) changes how hypervideo is displayed).

18. Regarding claim **57**, Rangan teaches wherein modifying said data section comprises adding a compressed overlay for said set-top box to overlay to data section (See Col. 15 lines 50-60 The hotspots are part of a compressed video stream Set top box extracts hotspots and overlays them).

19. Regarding claim **60**, Rangan teaches wherein said compression does not transmit data corresponding to overlay blocks which do not change between frames (See Col. 6 lines 46-67 and Col. 7 lines 1-35 Rangan teaches where the compression is MPEG compression. MPEG compression uses interframe compression. Interframe compression does not transmitting data corresponding to blocks which do not change between frames).

20. Regarding claim **61**, Rangan teaches wherein modifying said data section comprises adding replacement image blocks for said set-top to use for replacing blocks of said stream to said data section (See Fig. 6 Col. 23 lines 50-67 Col. 24 lines 1-12 When user clicks on hotspot a web page replaces blocks of stream).

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21. Regarding claim **62**, Rangan teaches wherein said personalization comprises adding an output from a computer program (See Col. 11 lines 7-25, A hyperlink is an output from a computer program).

22. Regarding claim **63**, Rangan teaches wherein said computer program comprises an e-mail program (See Col. 11 lines 7-25, User can click on hyperlink and a benefit is outputted by email program).

23. Regarding claim **64**, Rangan teaches wherein said computer program comprises an Internet browser (See Col. 11 lines 7-25 A hyperlink is an output from an internet browser).

24. Regarding claim **65**, Rangan teaches wherein said personalization comprises adding information from an Internet source (See Col. 11 lines 7-25 A hyperlink is information from an internet source).

25. Regarding claim **66**, Rangan teaches wherein personalizing said stream comprises not modifying an audio section of the stream, such that said audio can be used by a plurality of different personalizations of the stream (See Col. 15 lines 23-34 Col. 21 lines 27-33 Overlays only need to be a visual object).

26. Regarding claim **71**, Rangan teaches wherein personalizing said stream comprises enhancing a video display of said stream (See Col. 15 lines 23-34 Overlaying enhances video display. See Specification Page 7 lines 30-33)

27. Regarding claim **72**, Rangan teaches wherein said stream is compressed using an MPEG compliant compression scheme (See Col 20 lines 56-64).

28. Regarding claim **73**, Rangan teaches wherein said MPEG comprises MPEG2 (See Col. 5 lines 29-55).

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29. Regarding claim **74**, Rangan teaches wherein said compressed video transport comprises an MPEG compliant transport (See Col 20 lines 56-64).

30. Regarding claim **75**, Rangan teaches wherein said MPEG comprises MPEG2 (See Col. 5 lines 29-55).

31. Regarding claim **76**, Rangan teaches wherein said central distribution station comprises a cable network head-end (See Col. 24 lines 38-41).

32. Regarding claim **77**, Rangan teaches wherein said compressed video transport comprises a cable network transport (See Col. 24 lines 38-41).

33. Claims **78-94** are rejected under 35 U.S.C. 102(e) as being anticipated by Gordon et al. (US 6,754,905).

34. Regarding claim **78**, Gordon teaches a method of personalizing a broadcast stream, comprising: providing a broadcast video stream (See Fig. 4 Video Source 1 410V2 and Col. 10 lines 47-67 and Col. 11 lines 1-62); personalizing the stream at a central distribution station in a manner that reduces the visual quality of said provided video stream, while adding personalized information (See Fig. 7 and Col. 17 lines 33-58, Col. 23 lines 28-67, Col. 24 lines 1-20, Col. 27 lines 12-43 The head end (central distribution station) produces transport stream with video stream (PID1 721) and data (PID5 725). The data includes graphics for creating interactive program guide. The interactive program guide can be personalized); and transmitting the personalized broadcast stream to the user using a compressed video transport (See Col. 17 lines 33-58 MPEG is a compressed video transport). This claim is a method of personalizing which



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comprises a step of personalizing. In subsequent dependent claims "said personalization" is interpreted to mean either the method of personalizing or the step of personalizing.

35. Regarding claim **79**, Gordon teaches wherein said quality is reduced to maintain a bandwidth requirement of said stream in said transport (See Fig. 7 and Col. 23 lines 28-67, Col. 24 lines 1-6 Quality of Video can be reduced to minimum levels to utilize bandwidth).

36. Regarding claim **80**, Gordon teaches wherein said quality is reduced once for a plurality of personalizations (See Col. 17 lines 33-58 Col. 23 lines 57-67, Col. 24 lines 1-19 The quality of a video stream may be reduced so advertisements may be inserted for a particular subscriber).

37. Regarding claim **81**, Gordon teaches wherein personalizing said stream comprises showing data side by side with a reduced version of said stream (See Fig. 11A 620 and Col. 32 lines 62-67 and Col. 33 lines 1-7 Video stream is shown on the right side of screen data is shown on the left side).

38. Regarding claim **82**, Gordon teaches wherein personalizing said stream comprises overlaying data on said stream (See Col. 8 lines 66-67 and Col. 9 lines 1-17 "merged overlay and video").

39. Regarding claim **83**, Gordon teaches wherein data is shown as a ticker (See Fig. 1 155 and Col. 4 lines 24-42 and Col. 17 lines 14 Scrolling Banner is a ticker).

40. Regarding claim **84**, Gordon teaches wherein personalizing said stream comprises: providing a list of display commands (See Fig. 6 Col. 20 lines 27-49

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Items are selectable and alter what is displayed); generating a compressed video stream from said commands (See Col. 20 lines 27-49 A preview is a compressed video stream); and combining said comprised video stream and said broadcast stream (See Col. 20 lines 6-25 Movie trailers (previews) are shown in video barker this is combining video stream with broadcast stream).

41. Regarding claim **85**, Gordon teaches wherein said generating comprises directly generating transform coefficients from said commands (See Col. 20 lines 6-25 Displaying a compressed video stream is generating transform coefficients).

42. Regarding claim **86**, Gordon teaches wherein said personalized information is physically added at a set-top of said user (See Fig. 3 Step 308 and Col. 8 lines 66-67, Col. 9 lines 1-17 The set-top of user merges (physically adds) information).

43. Regarding claim **87**, Gordon teaches wherein said personalized information is transmitted as overlay data (See Col. 17 lines 33-58 and Col. 24 lines 35-53 IEPG which is personalized information is transmitted as overlay data).

44. Regarding claim **88**, Gordon teaches wherein said personalized information is transmitted as display commands (See Col. 17 lines 33-58 Col. 9 lines 18-48 The IEPG which is personalized information is transmitted as display commands).

45. Regarding claim **89**, Gordon teaches wherein said stream is compressed using an MPEG compliant compression scheme (See Col. 6 lines 33-35 Col. 17 lines 33-58).

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46. Regarding claim **90**, Gordon teaches wherein said MPEG comprises MPEG2 (See Col. 1 lines 20-32 and Col. 6 lines 51-59).
47. Regarding claim **91**, Gordon teaches wherein said compressed video transport comprises an MPEG compliant transport (See Col. 6 lines 33-35 Col. 17 lines 33-58).
48. Regarding claim **92**, Gordon teaches wherein said MPEG comprises MPEG 2 (See Col. 1 lines 20-32 and Col. 6 lines 51-59).
49. Regarding claim **93**, Gordon teaches wherein said central distribution station comprises a cable network head-end (See Fig. 4 400 and Col. 4 lines 43-53 Col. 54-62).
50. Regarding claim **94**, Gordon teaches wherein said compressed video transport comprises a cable network transport (See Col. 6 lines 18-35).

***Claim Rejections - 35 USC § 103***

51. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

52. Claim **43** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rangan et al. in view of Porter (US 6,208,354).
53. Regarding claim **43**, Rangan teaches wherein said overlay data is a translucent overlay that visually "paints over" underlying data (See Col. 15 lines

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27-30, Col. 21 lines 28-33, Col. 29 lines 15-16). Rangan fails to disclose where the overlay data is an opaque overlay that visually replaces underlying data. However, varying the level of transparency (from transparent to opaque) of an overlay is well known in the art as taught by Porter (See Col. 5 lines 41-52 An overlay image with an alpha value of one is opaque). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangan's overlay data so that it comprised opaque data that visually replaced underlying data as taught by Porter to create overlays that are visually unambiguous (See Rangan Col. 10 lines 24-29).

54. Claim **58** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rangan in view of Makur (4,963,030).

55. Regarding claim **58**, Rangan teaches where overlay data is compressed (See Col. 15 lines 50-60). Rangan fails to disclose where overlay data is compressed using a vector quantization method. However, compressing image data using a vector quantization method is well known in the art as taught by Makur (See Col. 1 lines 5-20). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modified Rangan so that overlay data was compressed using a vector quantization method as taught by Makur to achieve better compression (See Col. 1 lines 5-20).

56. Claim **59** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rangan in view of Lee et al. (US 5,778,098).

57. Regarding claim **59**, Rangan teaches where overlay data is compressed (See Col. 15 lines 50-60). Rangan fails to disclose where overlay data is

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compressed using a chain code method. However compressing a graphical feature, such as an overlay, using a chain code compression method is well known in the art as taught by Lee (See Col. 8 lines 9-20 Col. 30 lines 53-59). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangan's overlay so it was compressed using a chain code method as taught by Lee to provide an effective way of compressing objects represented by their contours (See Col. 30 lines 53-59, Col. 32 lines 53-63).

58. Claims **67-70** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rangan et al. in view of Wolzien (US 5,761,606).

59. Regarding claim **67**, Rangan teaches personalizing the stream by generating overlay data at a central distribution station (See Fig. 1 Col. 21 lines 27-33, Col. 23 lines 34-67, Col. 24 lines 1-5 ISP is a central distribution station that generates hotspots which are overlay data). Rangan generates overlay data to alert the viewer that additional content can be accessed (See Col. 10 lines 24-30). Rangan does not disclose modifying an audio section of the stream.

However, personalizing a video stream by modifying the audio section of the stream is well known in the art as taught by Wolzien (See Col. 3 lines 24-67 and Col. 4 lines 1-48 Col. 8 lines 8-26). Therefore it would have been obvious to one of ordinary skill in the art at the time was made to modify Rangan so that his hotspot was accompanied with a sound as taught in Wolzien to indicate to the user that additional content is available (See Wolzien Col. 3 lines 5-9).

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60. Regarding claim **68**, Rangan modified with Wolzien teaches wherein said modifying comprises adding feedback for user interactions to said audio (See Rangan Abstract, Sounding an alert).

61. Regarding claim **69**, Rangan modified with Wolzien teaches wherein said modifying comprises modifying only a single channel of two channels of said audio (See Wolzien Fig. 1 Speaker 26 Col. 8 lines 8-26 Sound is only played on one speaker, thus only one channel is modified).

62. Regarding claim **70**, Rangan modified with Wolzien teaches wherein said modifying comprises enhancing said audio (See Wolzien Col. 8 lines 8-26 A sound being produced is adding a sound effect which is enhancing audio as disclosed in the specification (Page 43 line 12)).

### ***Conclusion***


63. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamieson W. Fish whose telephone number is 571-272-7307. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

64. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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65. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JF 3/16/2005



NGOC YENVU  
PRIMARY EXAMINER